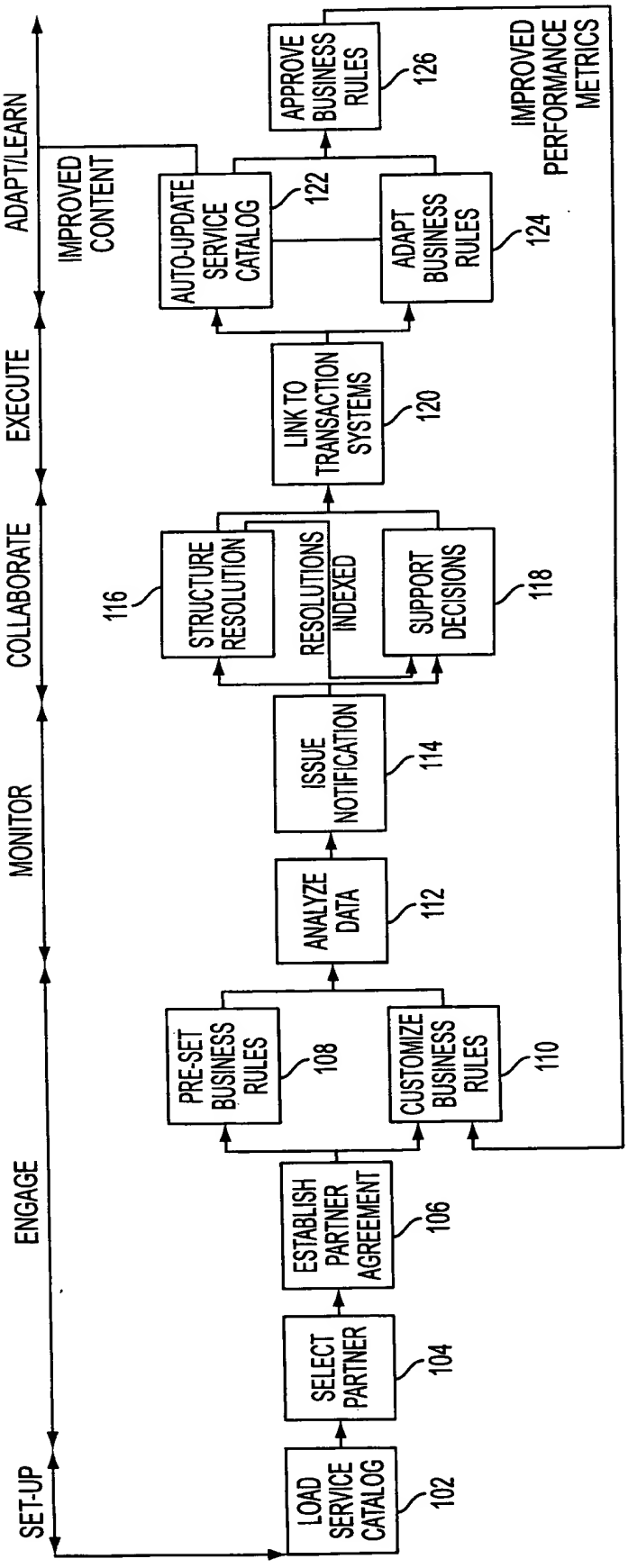
SET-UP
ENGAGE
MONITOR
COLLABORATE
EXECUTE
ADAPT/LEARN
LOAD SERVICE CATALOG
102
SELECT PARTNER
104
ESTABLISH PARTNER AGREEMENT
106
PRE-SET BUSINESS RULES
108
CUSTOMIZE BUSINESS RULES
110
ANALYZE DATA
112
ISSUE NOTIFICATION
114
STRUCTURE RESOLUTION
116
RESOLUTIONS INDEXED
SUPPORT DECISIONS
118
LINK TO TRANSACTION SYSTEMS
120
AUTO-UPDATE SERVICE CATALOG
122
ADAPT BUSINESS RULES
124
APPROVE BUSINESS RULES
126
IMPROVED CONTENT
IMPROVED PERFORMANCE METRICS
100

FIG. 1

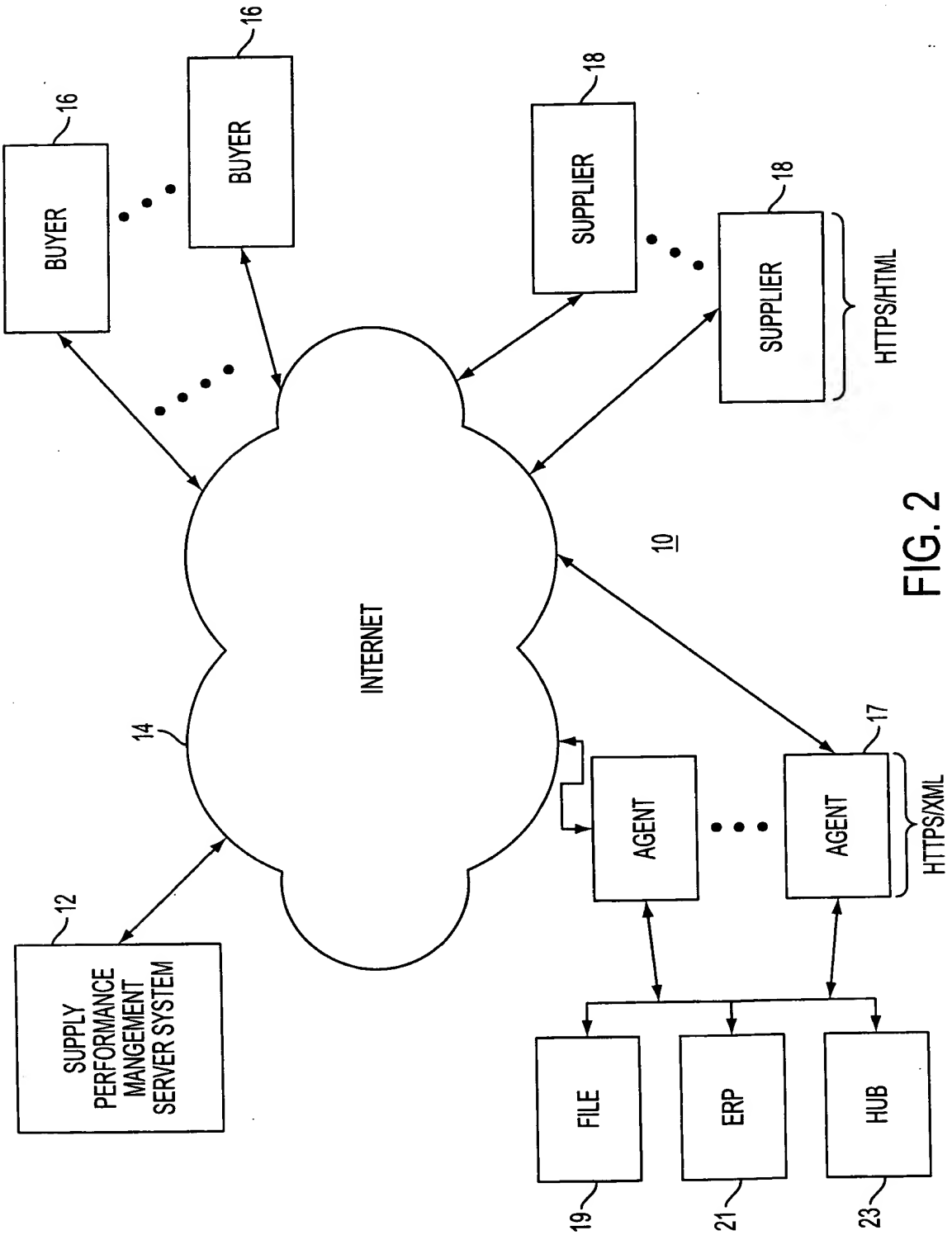
BUYER
16
BUYER
16
SUPPLIER
18
SUPPLIER
18
HTTPS/HTML
INTERNET
14
10
AGENT
AGENT
17
HTTPS/XML
SUPPLY PERFORMANCE MANGEMENT SERVER SYSTEM
12
FILE
19
ERP
21
HUB
23

FIG. 2

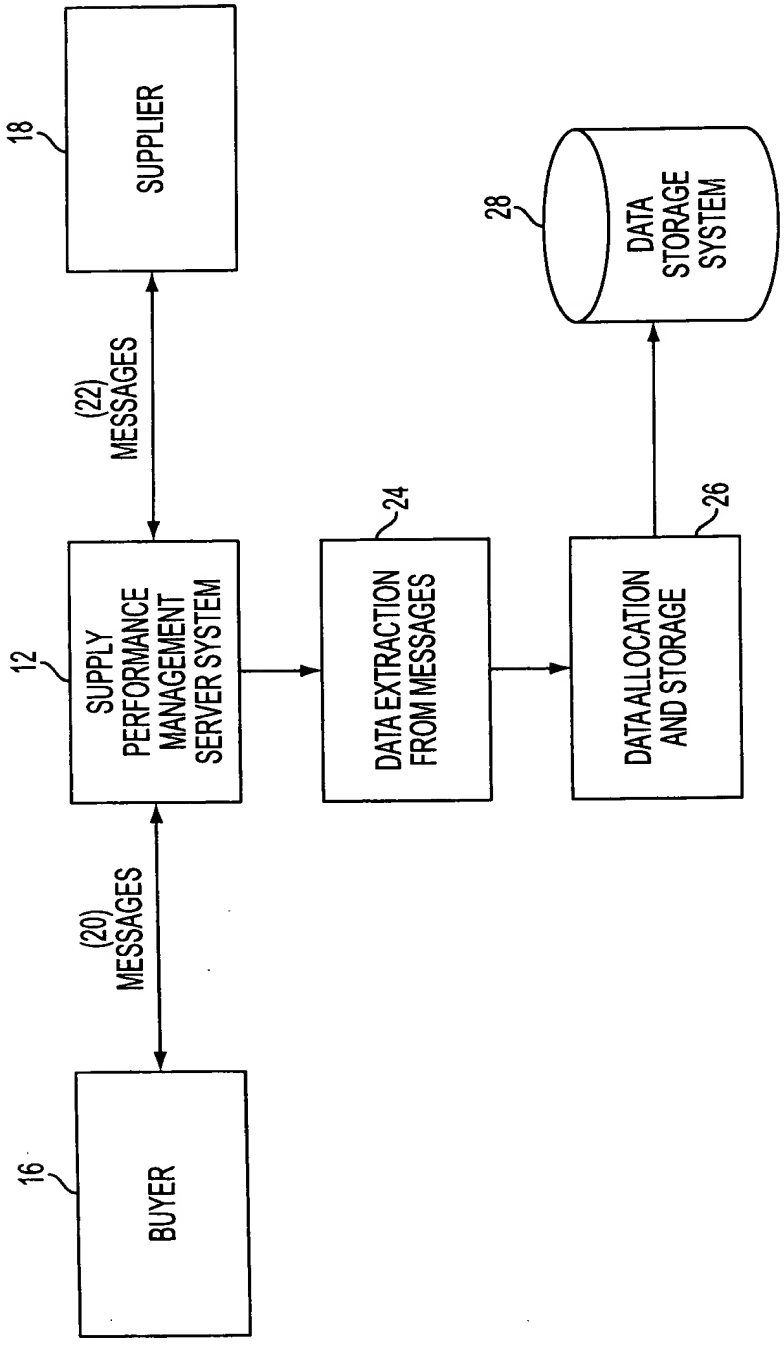
18
SUPPLIER
28
DATA STORAGE SYSTEM
(22) MESSAGES
12
SUPPLY PERFORMANCE MANAGEMENT SERVER SYSTEM
24
DATA EXTRACTION FROM MESSAGES
26
DATA ALLOCATION AND STORAGE
(20) MESSAGES
16
BUYER

FIG. 3

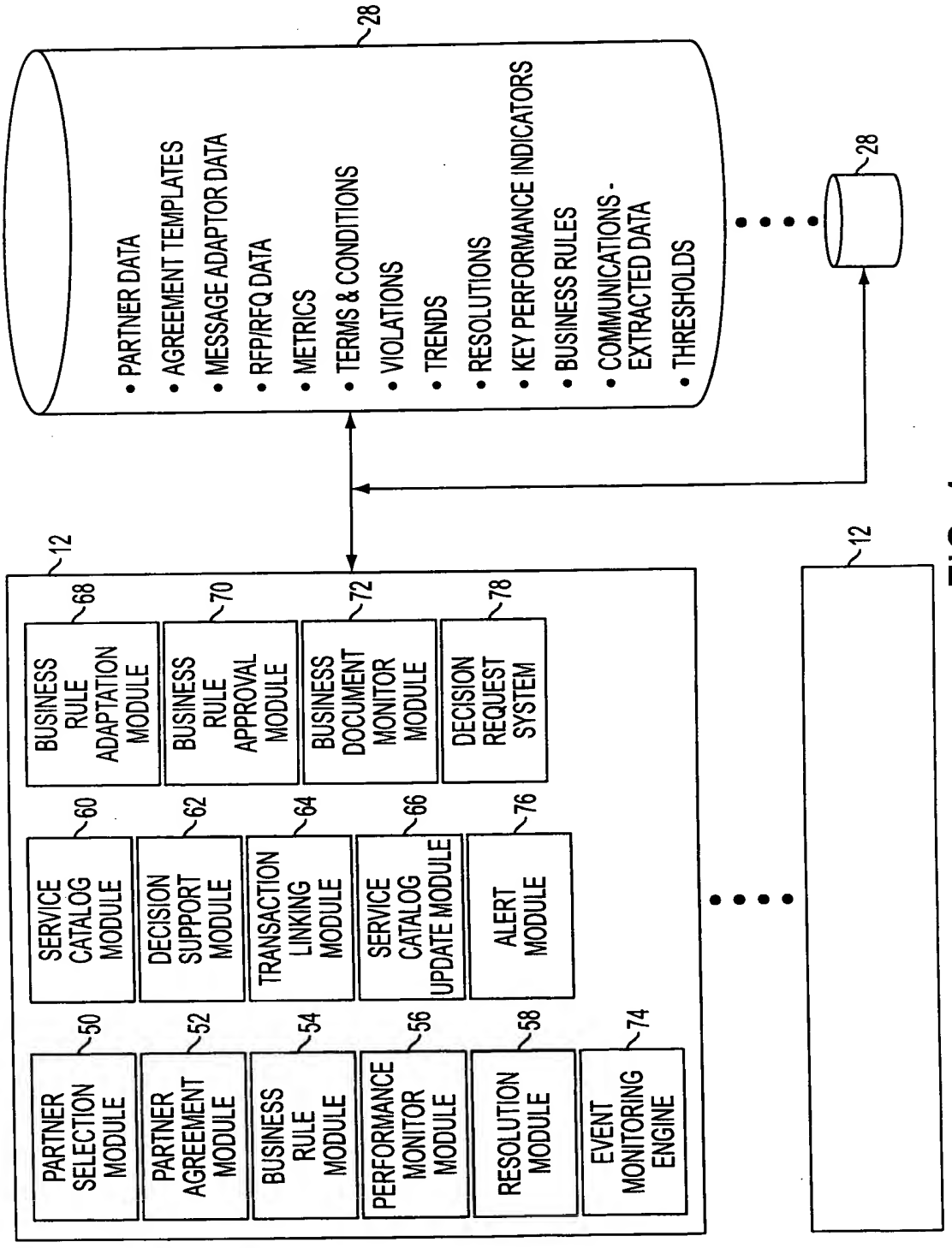
28
• PARTNER DATA
• AGREEMENT TEMPLATES
• MESSAGE ADAPTOR DATA
• RFP/RFQ DATA
• METRICS
• TERMS & CONDITIONS
• VIOLATIONS
• TRENDS
• RESOLUTIONS
• KEY PERFORMANCE INDICATORS
• BUSINESS RULES
• COMMUNICATIONS - EXTRACTED DATA
• THRESHOLDS
28
12
68
BUSINESS RULE ADAPTATION MODULE
70
BUSINESS RULE APPROVAL MODULE
72
BUSINESS DOCUMENT MONITOR MODULE
78
DECISION REQUEST SYSTEM
60
SERVICE CATALOG MODULE
62
DECISION SUPPORT MODULE
64
TRANSACTION LINKING MODULE
66
SERVICE CATALOG UPDATE MODULE
76
ALERT MODULE
50
PARTNER SELECTION MODULE
52
PARTNER AGREEMENT MODULE
54
BUSINESS RULE MODULE
56
PERFORMANCE MONITOR MODULE
58
RESOLUTION MODULE
74
EVENT MONITORING ENGINE
12

FIG. 4

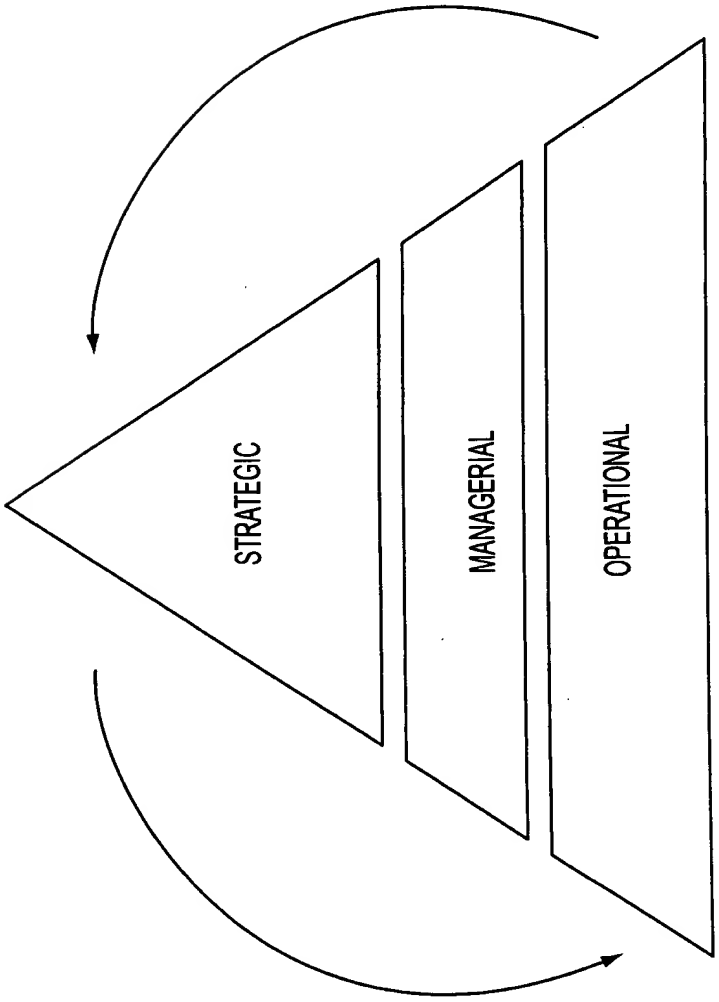

FIG. 5

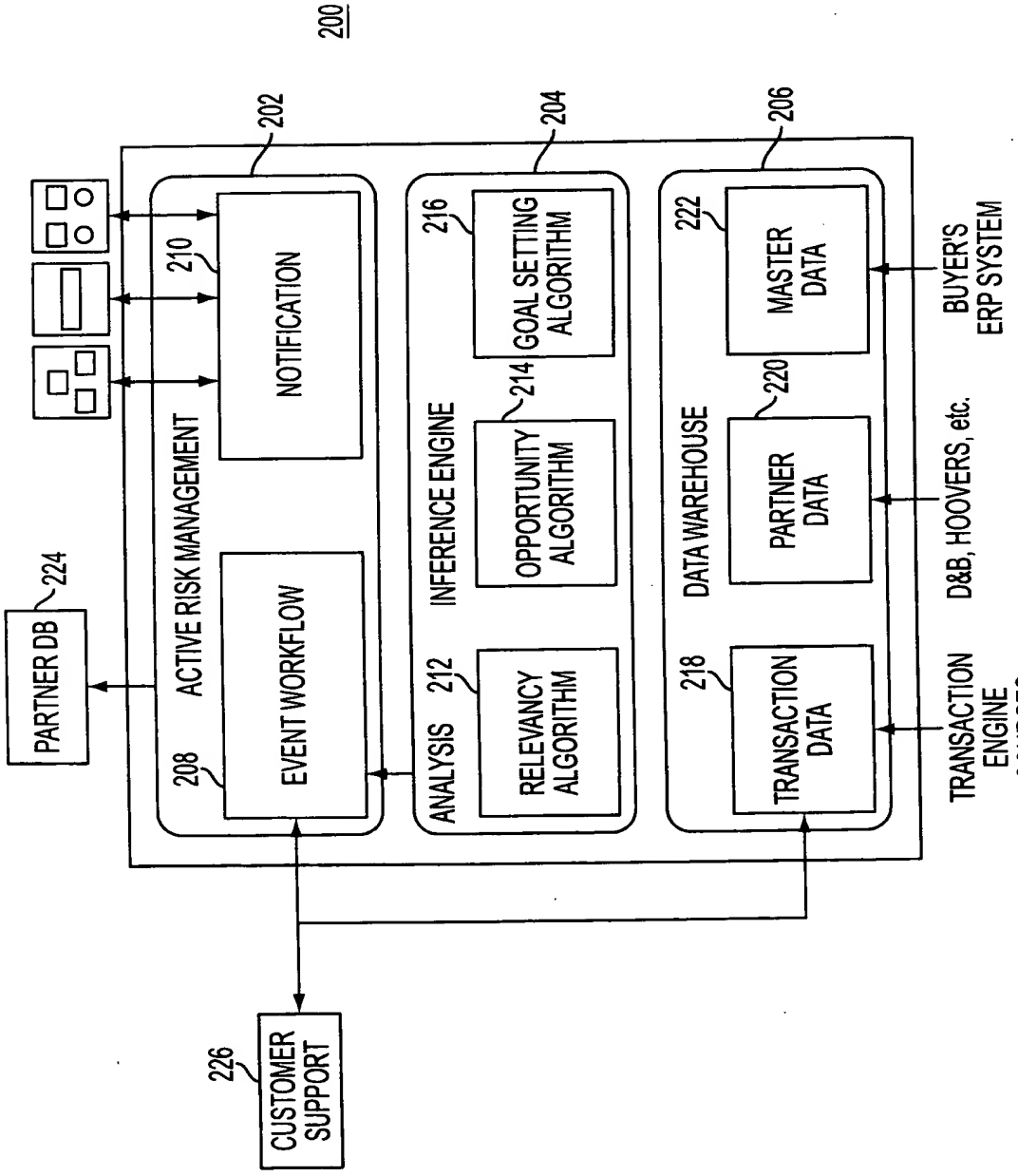
200
202
204
206
ACTIVE RISK MANAGEMENT
NOTIFICATION
210
EVENT WORKFLOW
208
INFERENCE ENGINE
GOAL SETTING ALGORITHM
216
OPPORTUNITY ALGORITHM
214
ANALYSIS
RELEVANCY ALGORITHM
212
DATA WAREHOUSE
MASTER DATA
222
PARTNER DATA
220
TRANSACTION DATA
218
BUYER'S ERP SYSTEM
D&B, HOOVERS, etc.
TRANSACTION ENGINE SOURCES
PARTNER DB
224
CUSTOMER SUPPORT
226

FIG. 6

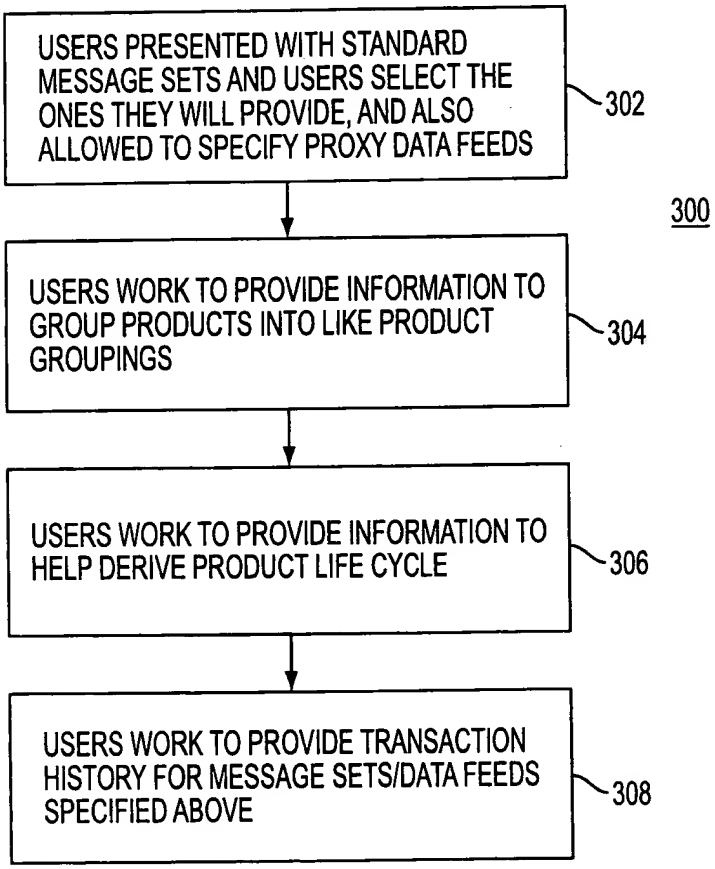

FIG. 7

Express Mail Label No. EL 840 845 695 US

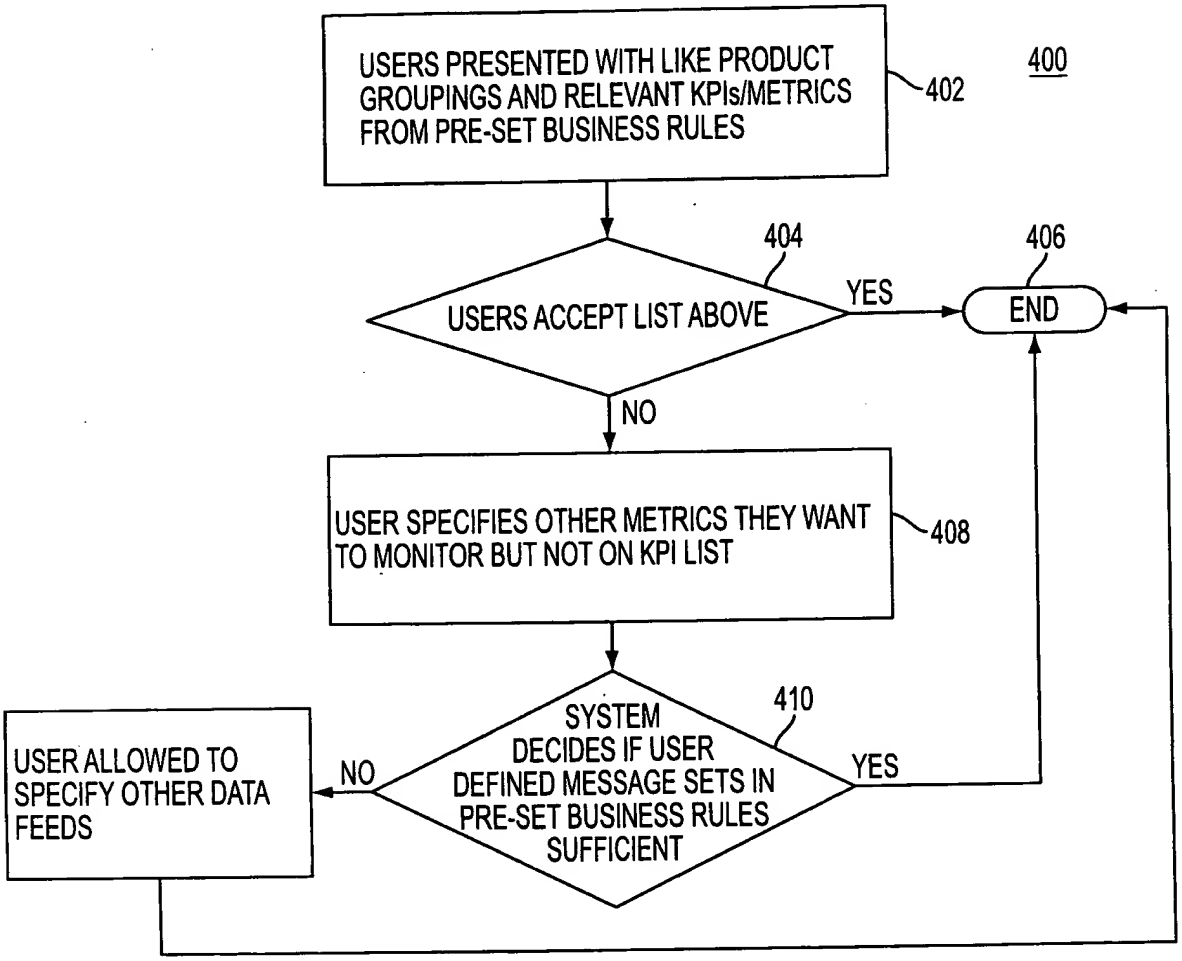

FIG. 8

Express Mail No. EL 980 054 145 US

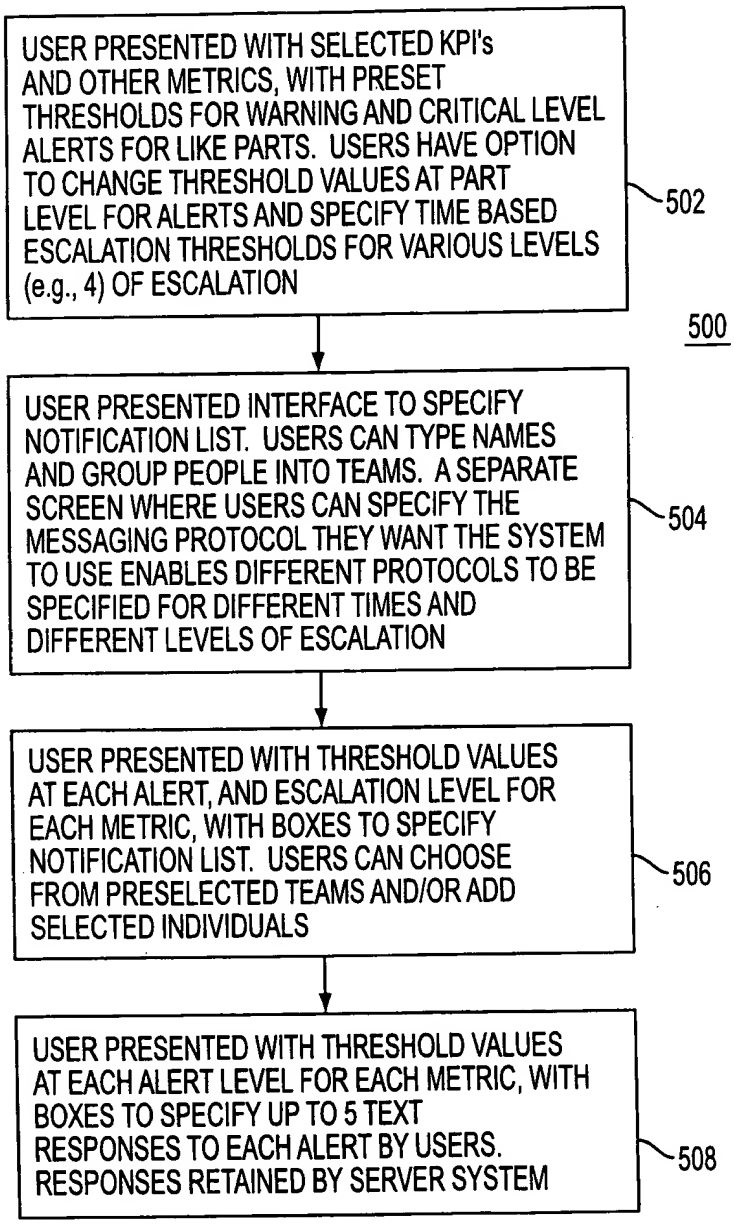

FIG. 9

Thomson-West

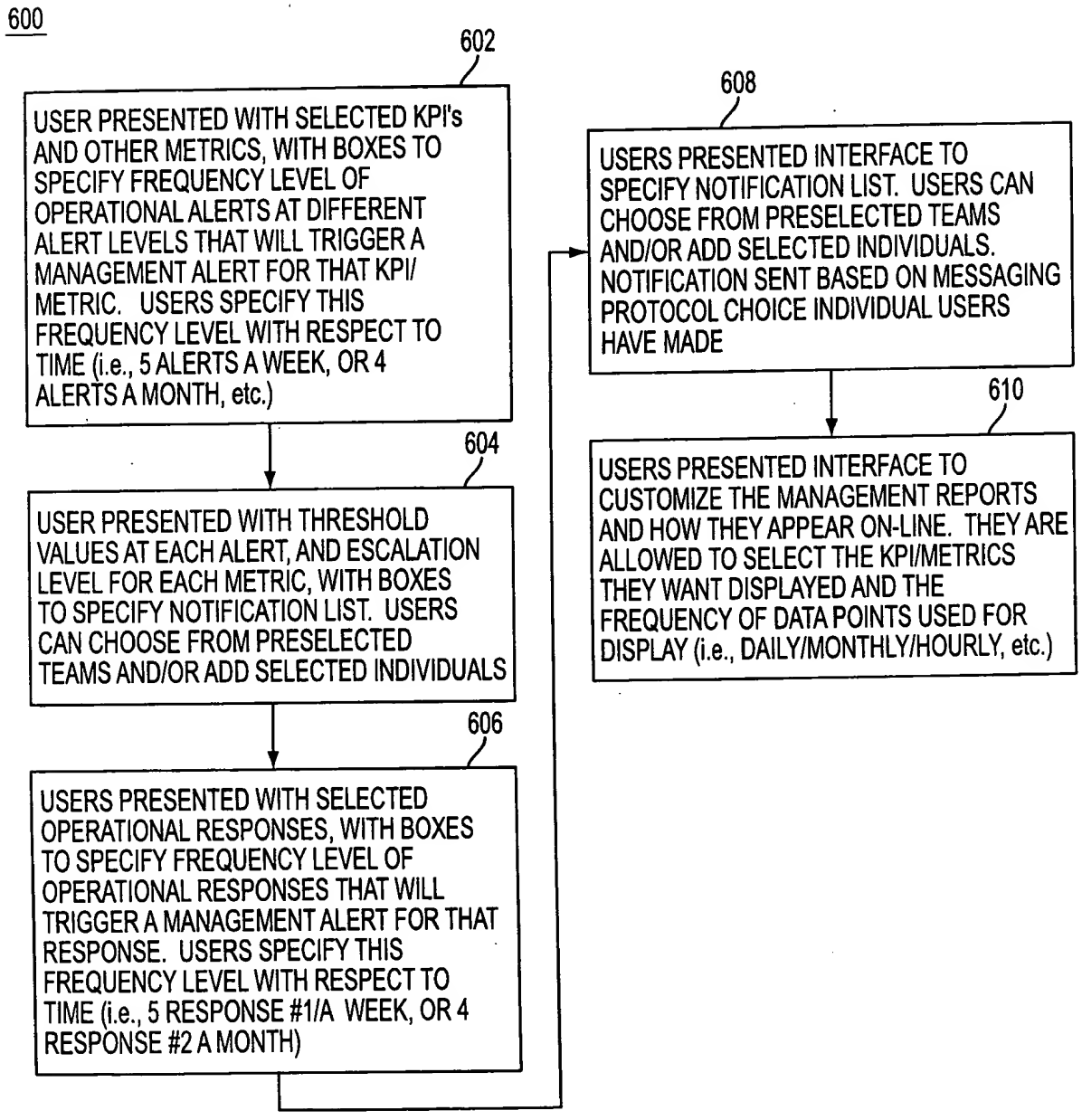

FIG. 10

Patent Application - 09765347

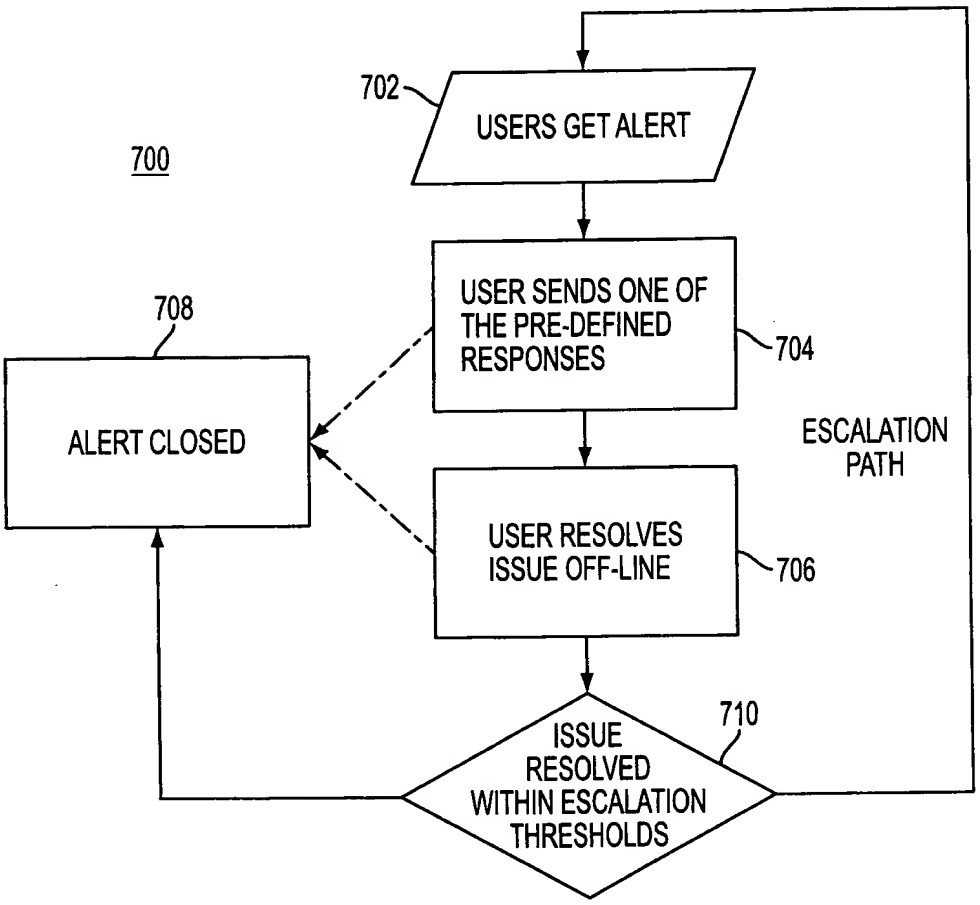
700
702
USERS GET ALERT
USER SENDS ONE OF THE PRE-DEFINED RESPONSES
704
708
ALERT CLOSED
ESCALATION PATH
USER RESOLVES ISSUE OFF-LINE
706
710
ISSUE RESOLVED WITHIN ESCALATION THRESHOLDS

FIG. 11

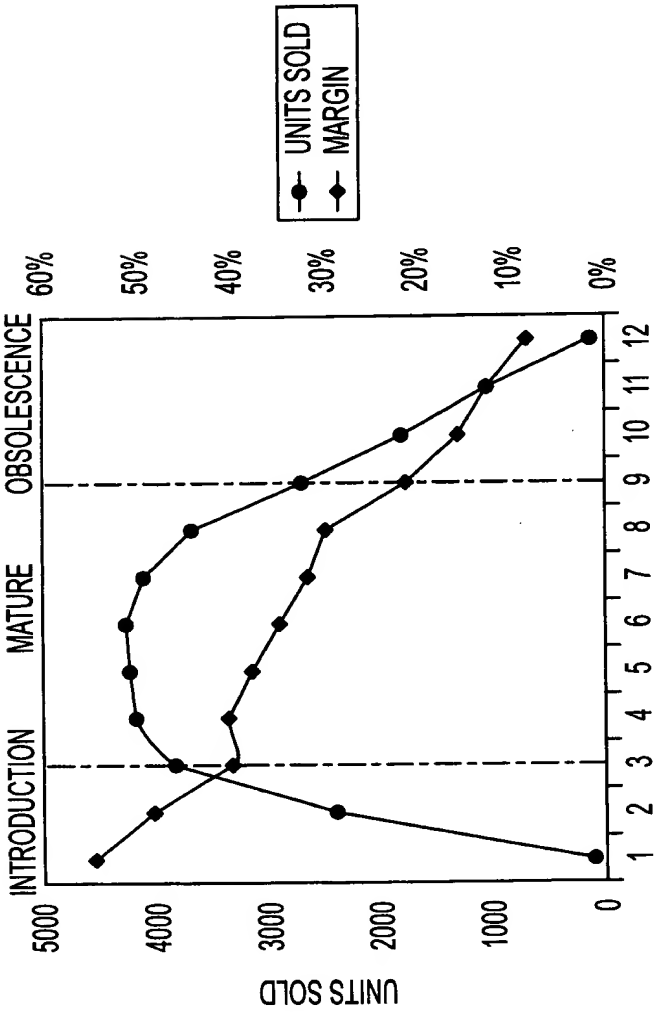
UNITS SOLD
MARGIN
60%
50%
40%
30%
20%
10%
0%
INTRODUCTION
MATURE
OBSOLESCENCE
5000
4000
3000
2000
1000
0
UNITS SOLD
1
2
3
4
5
6
7
8
9
10
11
12
MONTH

FIG. 12

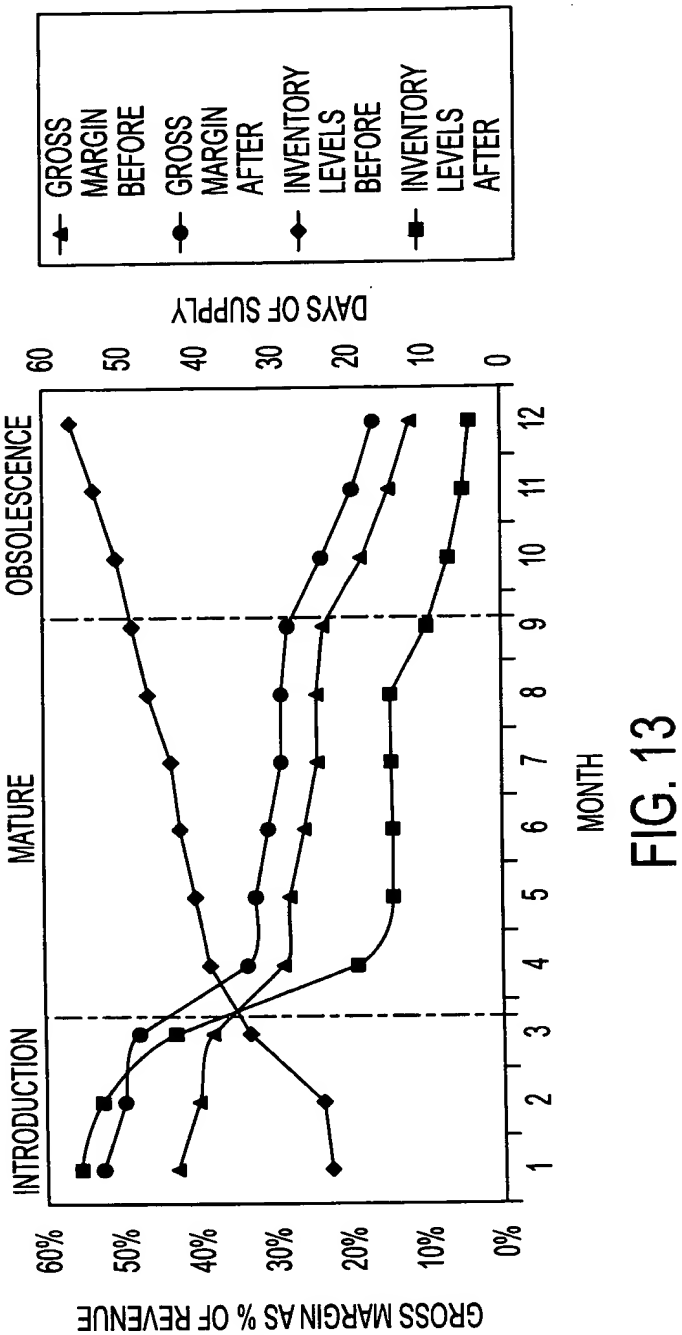
GROSS MARGIN BEFORE
GROSS MARGIN AFTER
INVENTORY LEVELS BEFORE
INVENTORY LEVELS AFTER
DAYS OF SUPPLY
60
50
40
30
20
10
0
OBSOLESCENCE
MATURE
INTRODUCTION
1
2
3
4
5
6
7
8
9
10
11
12
MONTH
60%
50%
40%
30%
20%
10%
0%
GROSS MARGIN AS % OF REVENUE

FIG. 13

ANALYTIC PACKS	KPI's										USER DEFINED/OTHER ELEMENTS
	FORECAST ACCURACY	FORECAST VARIANCE	SERVICE LEVEL	DAYS OF SUPPLY	INVENTORY TURNS	ON-TIME-SHIP	ON-TIME-DELIVERY	PERFECT ORDER	FILL RATE	CASH-TO-CASH	
TRADEOFF SERVICE LEVEL VS. COST	x		x	x							PRODUCT STANDARD COST
CONFIDENCE FACTOR	x	x									PRODUCT LIFECYCLE
TRADEOFF CUSTOMER SERVICE LEVELS VS. CHANNEL INVENTORY LEVELS				x		x	x	x			PRODUCT LIFECYCLE, PRODUCT STANDARD COST
RANK AND MANAGE PARTNER PERFORMANCE	x	x	x			x	x	x	x		INDUSTRY BENCHMARKS, USER DEFINED COMPOSITE METRICS
TRADEOFF CASH-TO-CASH VS. SERVICE LEVEL AND INVENTORY			x	x						x	PAYMENT CYCLE TIME INFORMATION

FIG. 14A

DETAILS		
ANALYTIC PACKS	DETAILS	INPUT
TRADEOFF SERVICE LEVEL VS. COST	ALLOW USERS TO VIEW TRADEOFFS BETWEEN FORECAST ACCURACY, LEVEL OF INVENTORY, COST AND SERVICE LEVELS. THIS LETS USERS SET POLICY THAT OPTIMIZES THE RELATIONSHIP BETWEEN THESE 3 VARIABLES, ALLOWING USERS TO SET INVENTORY LEVELS THAT MINIMIZES COST WHILE ACHIEVING DESIRED SERVICE LEVELS. ALSO LETS USERS TO SPECIFY POLICY BASED ON PRODUCT LIFECYCLE PROFILING, ALLOWING DIFFERENT POLICY TO BE SET FOR DIFFERENT PRODUCTS WITH SYSTEM RECOMMENDATIONS AROUND WHICH KPI TO OPTIMIZE BASED ON LIFECYCLE STAGE (SERVICE LEVEL AT INTRODUCTION, INVENTORY LEVELS AT OBSOLESCENCE)	HISTORICAL INFORMATION AROUND FORECAST ACCURACY, INVENTORY LEVELS (DOS), SERVICE LEVELS, PRODUCT LIFECYCLE INFORMATION
CONFIDENCE FACTORS	ALLOW USERS TO SEE THE DEGREE OF RELIABILITY AND ACCURACY OF PARTNER AND NETWORK COMMITMENTS BASED ON PRODUCT LIFECYCLE. THIS LETS THEM MAKE ALLOWANCES IN THEIR GOAL/THRESHOLD SETTING TO TAKE INTO ACCOUNT A PERCEIVED DEGREE OF INACCURACY/VARIANCE	HISTORY OF PERFORMANCE FOR FORECAST ACCURACY, FORECAST VARIANCE, ON-TIME-SHIP, ON-TIME-DELIVERY, PERFECT ORDER, FILL RATE
TRADEOFF CUSTOMER SERVICE LEVELS VS. CHANNEL INVENTORY LEVELS	ALLOW USERS TO VIEW TRADEOFFS BETWEEN CUSTOMER SERVICE LEVELS AND LEVELS OF INVENTORY TAKING INTO ACCOUNT THE PRODUCT LIFECYCLE. ALLOWS USERS TO SET GOALS THAT ACHIEVE DESIRED CUSTOMER SERVICE LEVELS WHILE MINIMIZING AMOUNT OF INVENTORY THAT NEEDS TO BE CARRIED. ALSO ALERT USERS WHEN GOALS SET ARE NOT APPROPRIATE BASED ON PRODUCT LIFECYCLE STAGE	HISTORICAL INFORMATION AROUND ON-TIME-SHIP, ON-TIME-DELVIERY, PERFECT ORDER, INVENTORY LEVELS (DOS), PROD STD COST & PRODUCT LIFECYCLE INFORMATION
RANK AND MANAGE PARTNER PERFORMANCE	ALLOW USERS TO SEE AND COMPARE PARTNER PERFORMANCE ACROSS THE SUPPLY-CHAIN NETWORK AND ALSO ACROSS INDUSTRY BENCHMARKS	HISTORICAL INFORMATION ON PARTNER PERFORMANCE FOR RELEVANT KPIs (OTS, OTD, FILL RATE, PERFECT ORDER), INFORMATION AGGREGATION FROM OTHER PREMONITION INSTALLATIONS, DATA FEEDS FROM D&B, HOOVERS AND OTHER INDUSTRY DATABASES, USER DEFINED COMPOSITE METRICS
CONFIDENCE FACTORS	ALLOW USERS TO SEE HOW CHANGING SERVICE LEVELS AND INVENTORY LEVELS AFFECT THE CASH-TO-CASH CYCLE TIME. ALLOWS USERS TO SET GOALS ACROSS THE OTHER 2 METRICS TO MINIMIZE THE CASH-TO-CASH CYCLE TIME	HISTORICAL INFORMATION ON SERVICE LEVELS, INVENTORY LEVELS, & CASH-TO-CASH CYCLE TIME

FIG. 14B

	MESSAGE SETS									
KPI's	FORECAST (830)	INVENTORY REPORT (846)	PO (850)	PO/ACK (855)	MATERIAL RELEASE (862)	INVOICE (810)	PAYMENT (820)	ADVANCE SHIP NOTIFICATION (856)	RECEIPT ADVICE (861)	ANALYTICS
FORECAST ACCURACY	x	x			x					TRADEOFF ANALYSIS BETWEEN SERVICE LEVELS AND COST. SET CONFIDENCE LEVELS BASED ON PAST PERFORMANCE AND PRODUCT LIFECYCLE PHASE.
FORECAST VARIANCE	x									HIGHLIGHTS RELIABILITY AND PREDICTABILITY OF FORECASTING PROCESS. SET CONFIDENCE LEVELS BASED ON PRODUCT LIFECYCLE PHASE AND PAST PARTNER PERFORMANCE.
SERVICE LEVEL		x	x		x					TRADEOFF ANALYSIS OF LOST REVENUE VS. HIGHER INVENTORY CARRYING COSTS. SET SMART GOALS BY PRODUCT BASED ON LIFECYCLE PROFILING.
DAYS OF SUPPLY	x	x			x					MINIMIZE INVENTORY LEVELS WHEN COMFORTABLE WITH FORECAST VARIABILITY. ACCELERATE INVENTORY TURNS BY DYNAMICALLY ADJUSTING GOALS BASED ON PRODUCT LIFECYCLE AND PAST PERFORMANCE OF PARTNERS.
ON-TIME-SHIP			x	x	x	x		x		IMPROVE CUSTOMER SATISFACTION AND RETENTION BY ACTIVELY MANAGING TRADEOFFS BETWEEN CUSTOMER SERVICE LEVELS AND CHANNEL INVENTORY LEVELS. SET AGGRESSIVE, ACHIEVABLE GOALS BY PRODUCT BASED ON LIFECYCLE PHASE.
ON-TIME-DELIVERY			x	x	x	x	x		x	IMPROVE CUSTOMER SATISFACTION AND RETENTION BY ACTIVELY MANAGING TRADEOFFS BETWEEN CUSTOMER SERVICE LEVELS AND CHANNEL INVENTORY LEVELS. SET AGGRESSIVE, ACHIEVABLE GOALS BY PRODUCT BASED ON LIFECYCLE PHASE.
PERFECT ORDER			x	x	x	x	x	x	x	ACTIVELY MANAGE PARTNER SERVICE LEVEL AND EFFECTIVENESS, TO CREATE A SUPERIOR CUSTOMER EXPERIENCE. FOCUS MANAGEMENT ATTENTION ON "HOT SPOTS" WITH METALERT PATTERN MATCHING TECHNOLOGY.
FILL RATE			x		x	x		x		ACTIVELY MANAGE PARTNER SERVICE LEVEL AND EFFECTIVENESS, TO CREATE A SUPERIOR CUSTOMER EXPERIENCE. USE TO RANK AND DRIVE PARTNER PERFORMANCE.

FIG. 14C

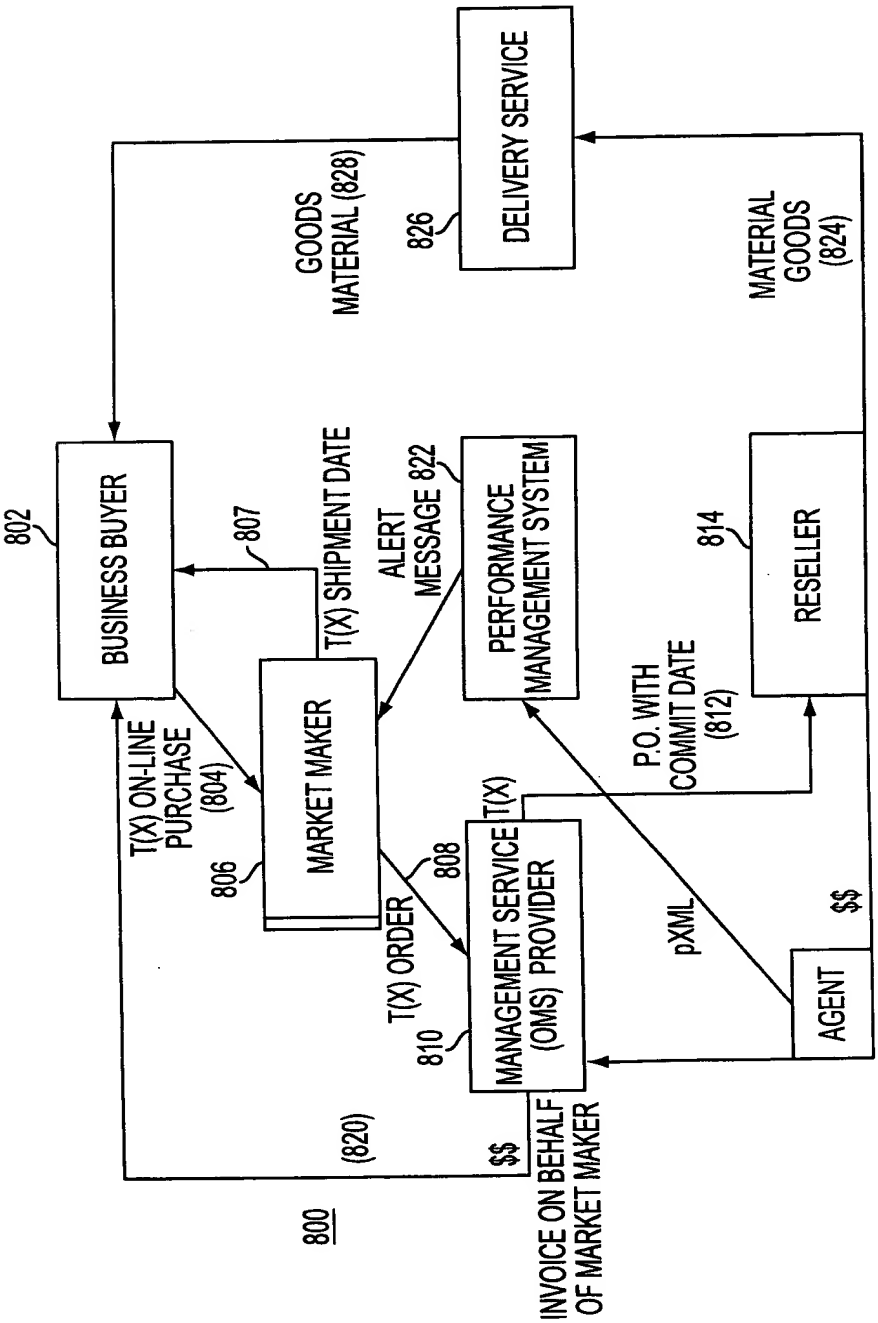
DELIVERY SERVICE
826
GOODS MATERIAL (828)
MATERIAL GOODS (824)
BUSINESS BUYER
802
807
T(X) SHIPMENT DATE
ALERT MESSAGE 822
PERFORMANCE MANAGEMENT SYSTEM
814
RESELLER
T(X) ON-LINE PURCHASE (804)
806
MARKET MAKER
808
T(X)
P.O. WITH COMMIT DATE (812)
T(X) ORDER
810
MANAGEMENT SERVICE (OMS) PROVIDER
pXML
AGENT
$$
INVOICE WHEN SHIPMENT TO BUYER (816)
(820)
$$
INVOICE ON BEHALF OF MARKET MAKER
800

FIG. 15

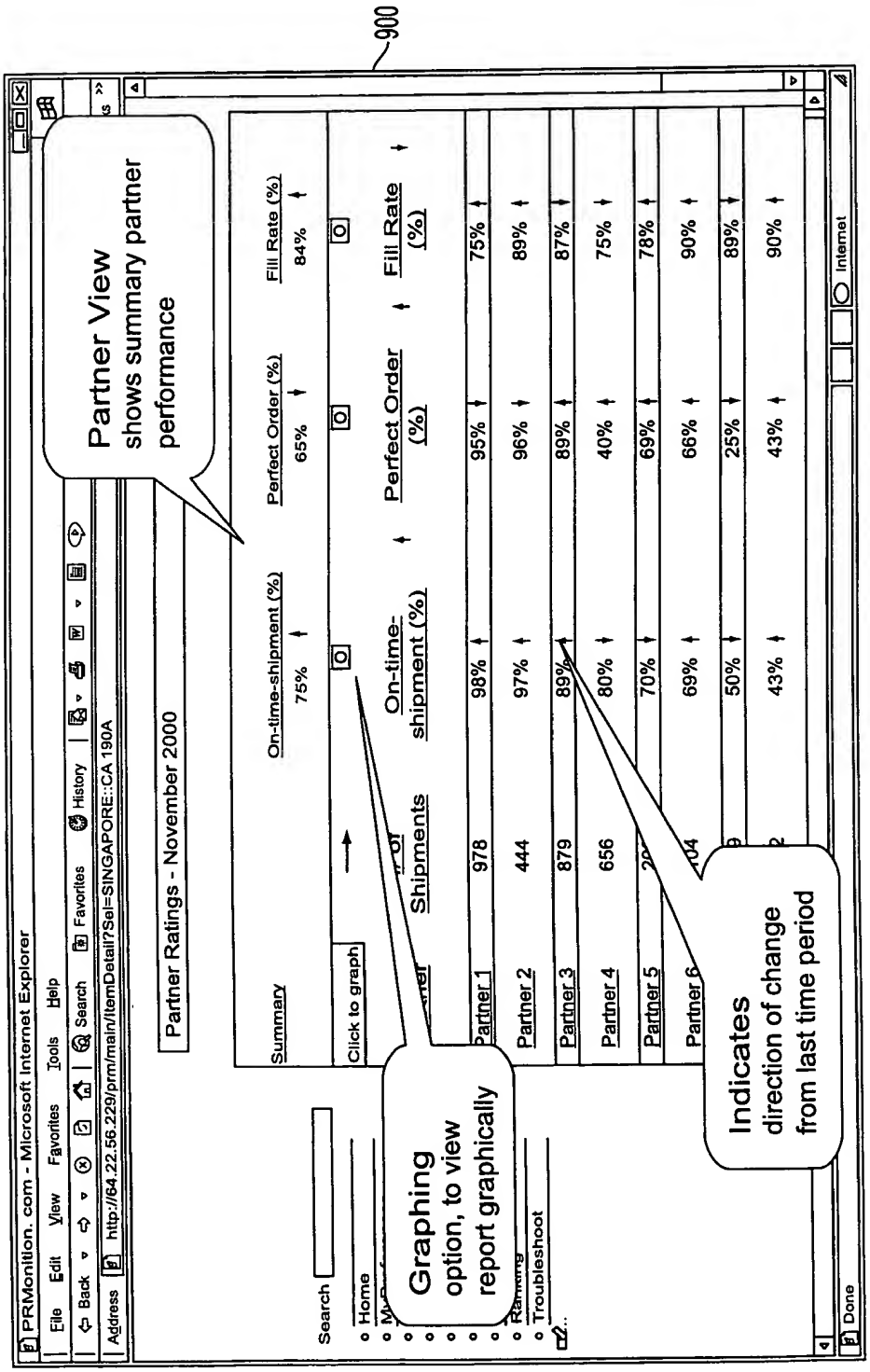
900
PRMonition.com - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://64.22.56.229/prm/main/ItemDetail?Sel=SINGAPORE::CA 190A
Partner Ratings - November 2000
Partner View shows summary partner performance
Summary
On-time-shipment (%) 75%
Perfect Order (%) 65%
Fill Rate (%) 84%
Click to graph
Shipments
On-time-shipment (%)
Perfect Order (%)
Fill Rate (%)
Partner 1 978 98% 95% 75%
Partner 2 444 97% 96% 89%
Partner 3 879 89% 89% 87%
Partner 4 656 80% 40% 75%
Partner 5 70% 69% 78%
Partner 6 69% 66% 90%
50% 25% 89%
43% 43% 90%
Search
Home
Troubleshoot
Graphing option, to view report graphically
Indicates direction of change from last time period
Internet
Done

FIG. 16

TOTO80" 2hE59260

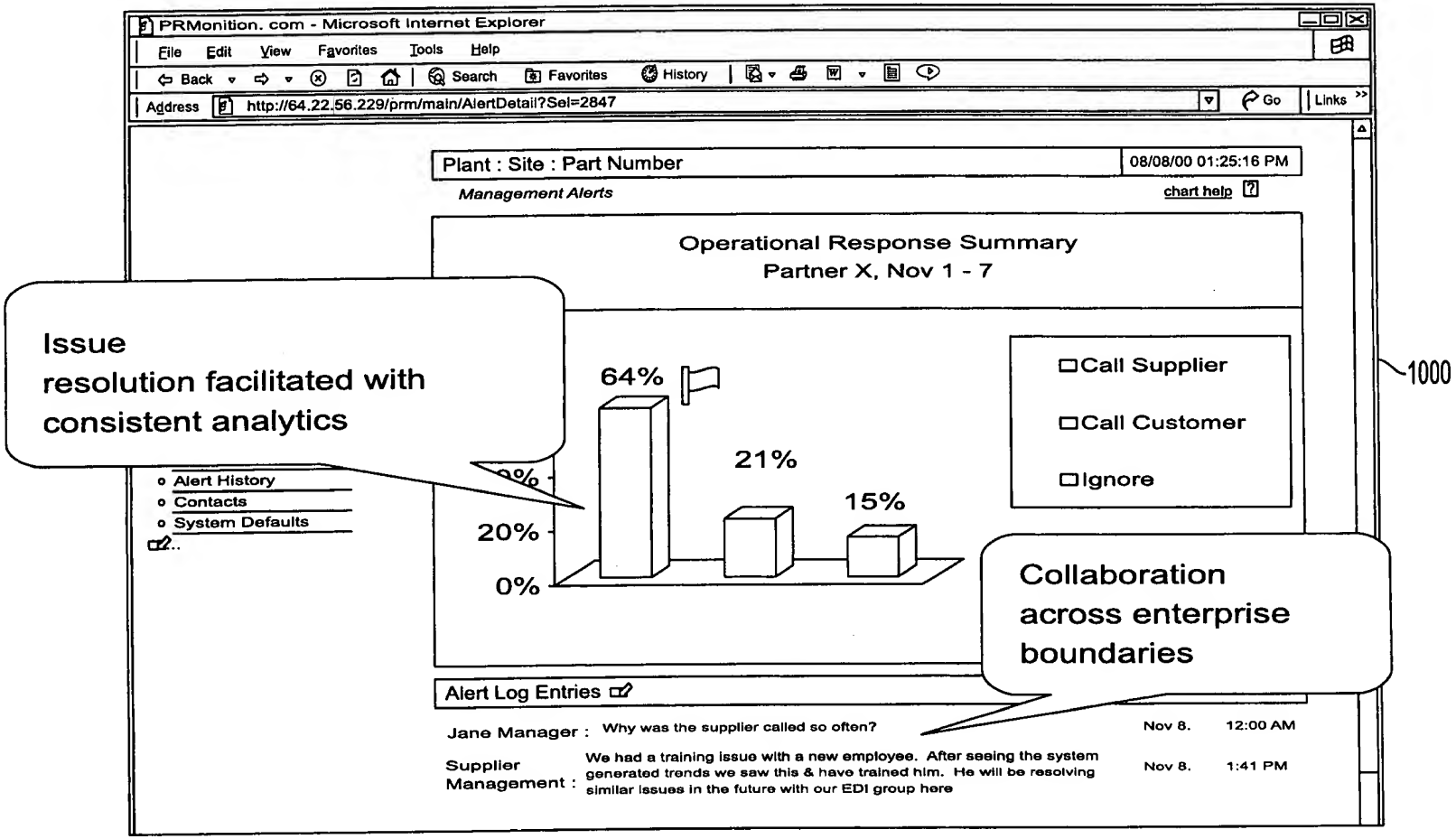

FIG. 17

"Performance-Based Supply Chain Management System A Method With Collaboration Environment For Dispute Re[illegible]on"
Applicants: Daryl E. Eicher, Jr., et al.
Application No. 09/765,347
Attorney Docket No. 58462.000004

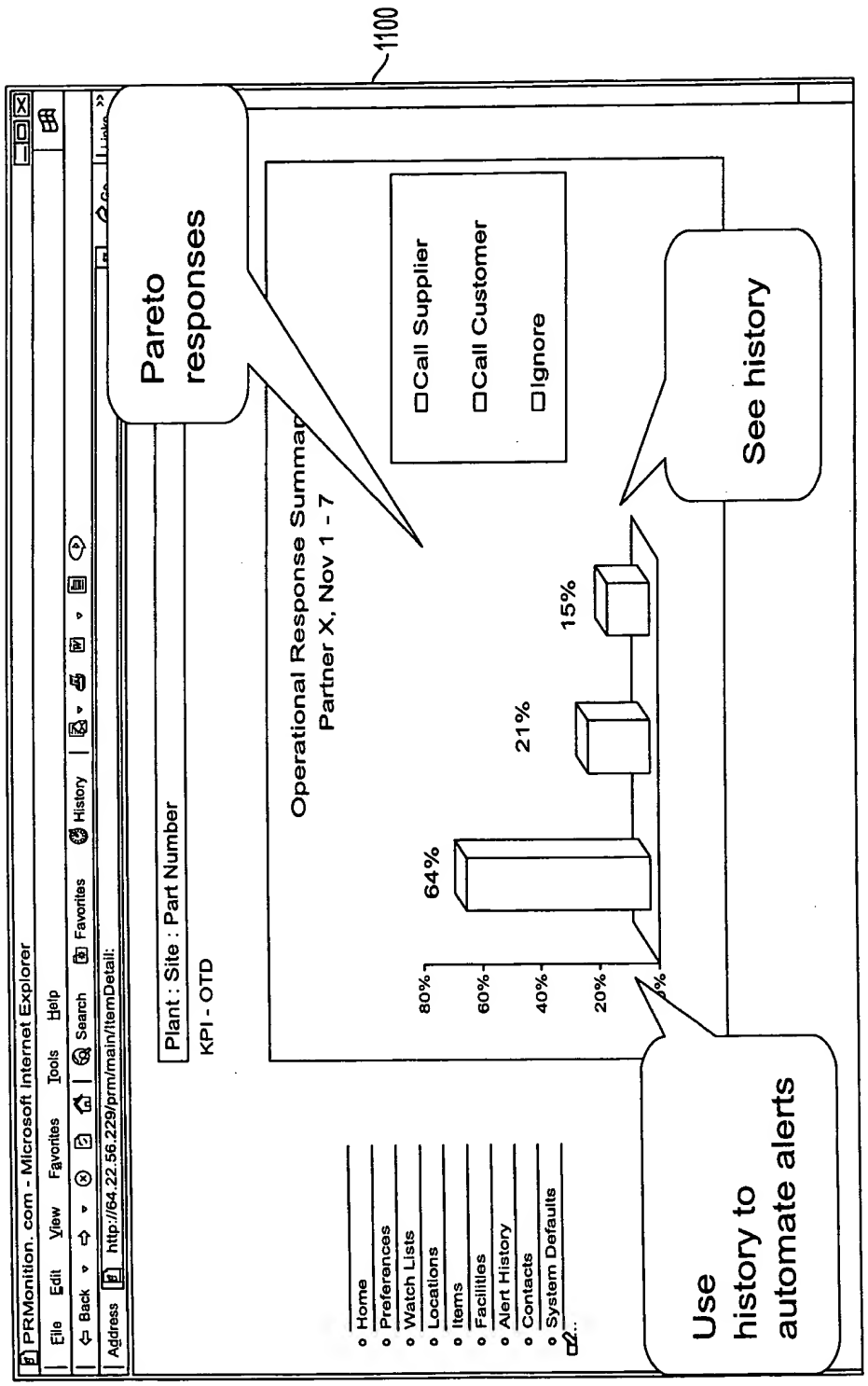
1100
PRMonition.com - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://64.22.56.229/prm/main/itemDetail:
Pareto responses
Plant : Site : Part Number
KPI - OTD
Operational Response Summary
Partner X, Nov 1 - 7
Call Supplier
Call Customer
Ignore
See history
64%
21%
15%
80%
60%
40%
20%
Home
Preferences
Watch Lists
Locations
Items
Facilities
Alert History
Contacts
System Defaults
Use history to automate alerts

FIG. 18

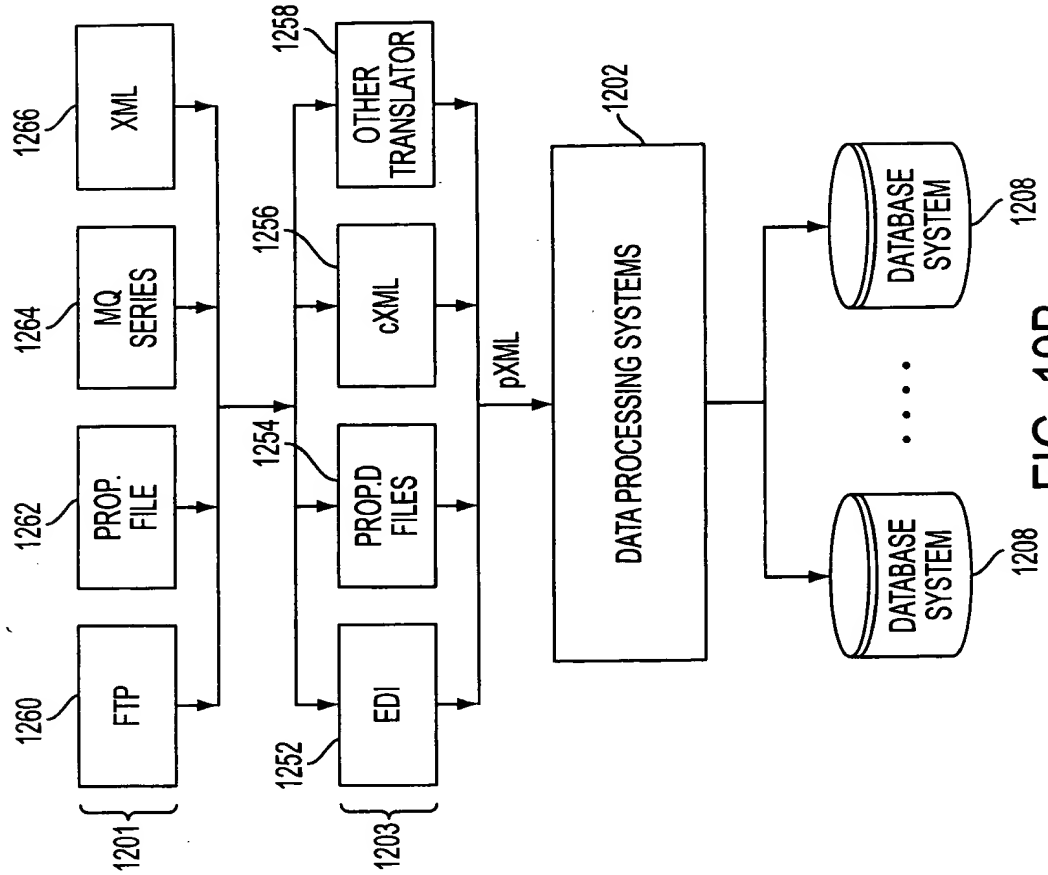

FIG. 19B

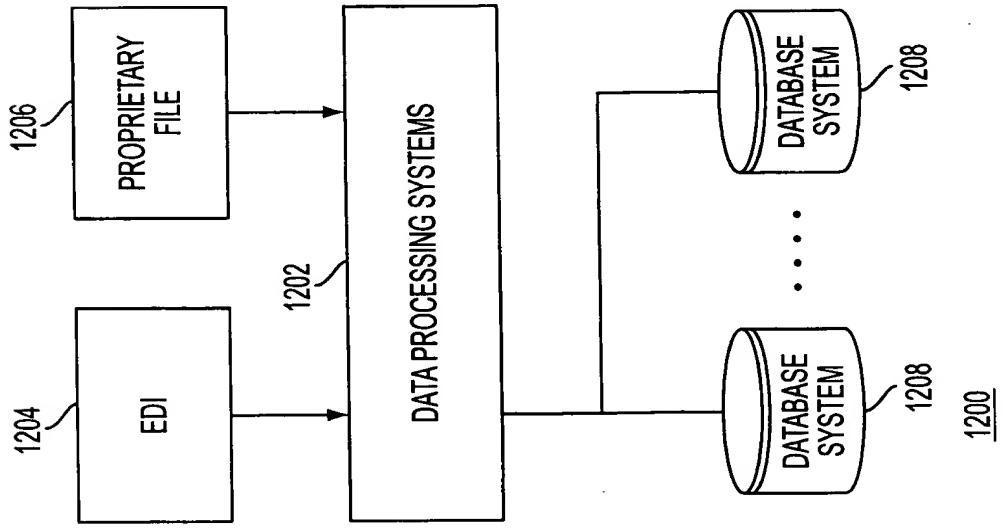

FIG. 19A

TOTO80" 24E59260

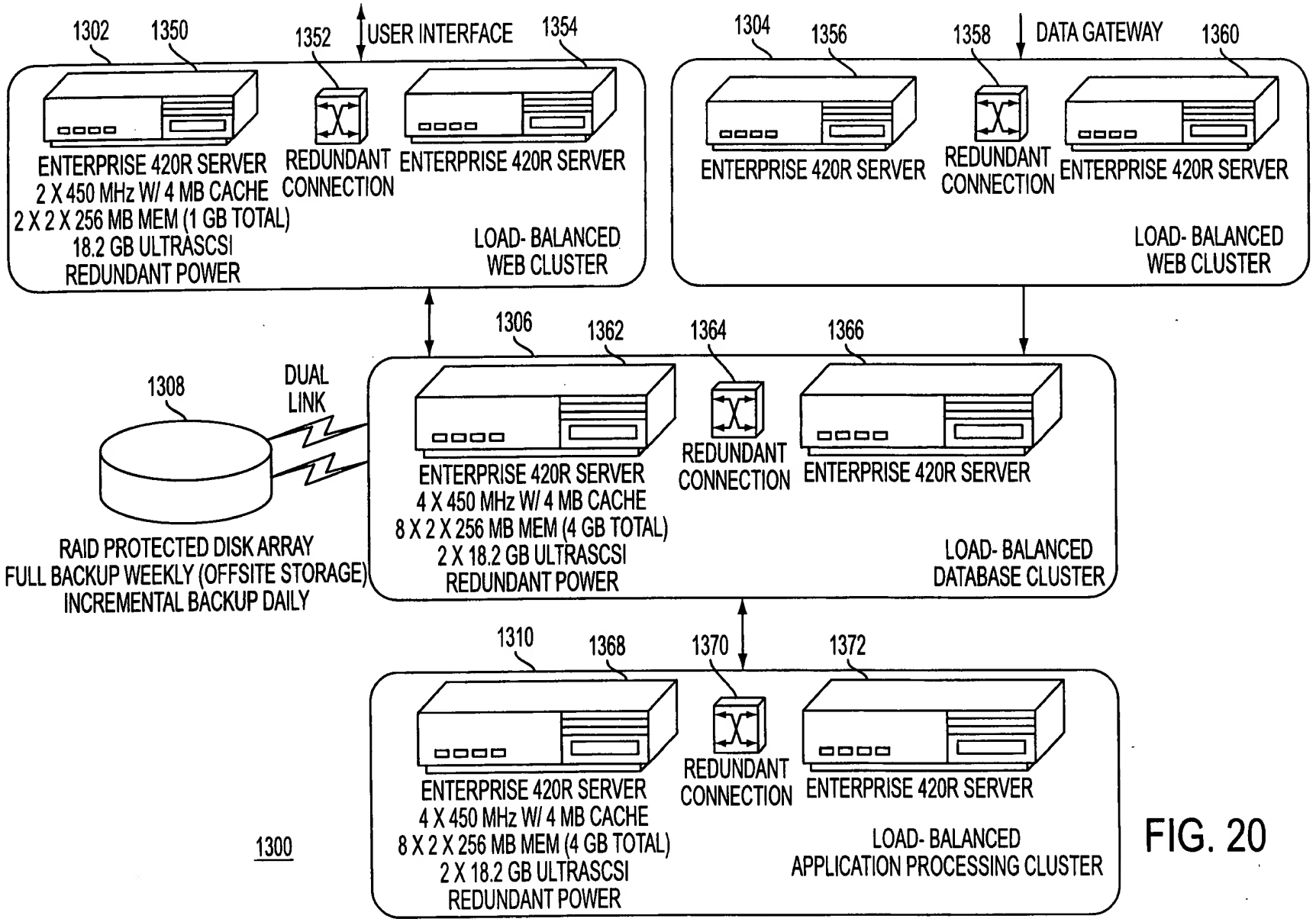

FIG. 20

"Performance-Based Supply Chain Management System A Method With Collaboration Environment For Dispute Resolution"
Applicants: Daryl E. Eicher, Jr., et al.
Application No. 09/765,347
Attorney Docket No. 58462.000004